(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 19 August 2004 (19.08.2004)

PCT

(10) International Publication Number WO 2004/070324 A1

(51) International Patent Classification⁷: 1/684, H02N 11/00

G01F 1/688,

(21) International Application Number:

PCT/IN2003/000281

(22) International Filing Date: 26 August 2003 (26.08.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 86/MAS/2003

3 February 2003 (03.02.2003) I

(71) Applicant (for all designated States except US): INDIAN INSTITUTE OF SCIENCE [IN/IN]; Bangalore 560 012, Karnataka (IN).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SOOD, Ajay, Kumar [IN/IN]; Indian Institute of Science, Bangalore 560 012, Karnataka (IN). GHOSH, Shankar [IN/IN]; Indian Institute of Science, Bangalore 560 012, Karnataka (IN).

(74) Agents: SUBRAMANIAM, Hariharan et al.; Subramaniam, Nataraj & Associates, E 556 Greater Kailash II, New Delhi 110 048 (IN).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

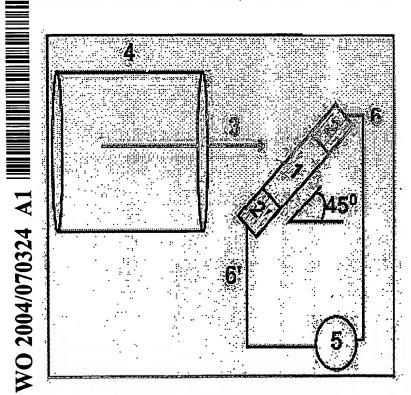
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR MEASUREMENT OF GAS FLOW VELOCITY, METHOD FOR ENERGY CONVERSION USING GAS FLOW OVER SOLID MATERIAL, AND DEVICE THEREFOR



(57) Abstract: The present invention relates to a method for energy conversion by gas flow over solid materials and also to a method for measurement of velocity of a gas flow over solid material such as doped semiconductors, graphite, and the like as a function of the 5 electricity generated in the solid material due to the flow of the gas along the surface thereof using a combination of the Seebeck effect and Bernoulli's principle.

(a)